

85. COCHLIANTHUS Benth in Miquel, Pl. Jungh. 234. 1852.

旋花豆属 xuan hua dou shu

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Herbs, climbing, turning black when dry. Leaves pinnately 3-foliolate, stipellate. Racemes axillary; rachis slender, nodose. Flowers usually clustered at swollen nodes; bracts and bracteoles minute, subulate, caducous or subpersistent. Calyx campanulate, 2-lipped, upper 2 teeth connate into a larger upper lip, apex emarginate or entire, lower lip with 3 teeth, middle tooth longest, lateral 2 shorter. Petals subequal in length or standard shorter, with long or short claws; standard broadly ovate, with inflexed auricles at base; wings oblong or subspatulate, slightly longer than standard, base with long auricle; keel linear, as long as or longer than wings, coiled inward in upper part. Stamens diadelphous; vexillary stamen free; anthers uniform. Ovary shortly stipitate, many ovuled; style filiform, glabrous, upper part coiled inward into 1 or 2 circles; stigma large, peltate-dilated, terminal. Legumes linear-oblong, incurved, compressed, obscurely septate. Seeds quadrate; hilum short, estrophiolate.

Two species: S and SW China, Nepal; two species (one endemic) in China.

- 1a. Leaflets broadly ovate-rhomboid, apex broadly acute, mucronate 1. *C. montanus*
- 1b. Leaflets ± narrowly ovate-rhomboid, apex caudate-acuminate 2. *C. gracilis*

1. Cochlianthus montanus (Diels) Harms, Repert. Spec. Nov. Regni Veg. 17: 136. 1921.

Open forests, mountain slopes, scrub, roadsides; 1400–1800 m. Sichuan, Xizang, SW Yunnan [Bhutan, Nepal].

高山旋花豆 gao shan xuan hua dou

Mucuna montana Diels, Notes Roy. Bot. Gard. Edinburgh 5: 247. 1912.

Herbs, robust, twining and climbing. Stems densely villos with grayish white hairs. Terminal leaflet broadly ovate-rhomboid, symmetric, lateral ones slightly oblique, 5.5–8 × 4.5–8 cm, densely silky pubescent on both surfaces, base rounded or broadly cuneate, apex broadly acute, mucronate. Calyx densely adpressed pubescent outside; upper 2 teeth connate to an emarginate lip, lowest tooth lanceolate, ca. 7 mm. Corolla pink or rose-red; standard broadly ovate, ca. 18 mm, shortly clawed; wings slightly longer than standard, base with auricle as long as claw; keel longest, linear, coiled inward. Legumes narrowly oblong, compressed, hirsute. Fl. Jul.

• Dry rocky scrub on mountain slopes; ca. 3000 m. Yunnan (Lijiang).

2. Cochlianthus gracilis Benth in Miquel, Pl. Jungh. 234. 1852.

- 1a. Upper 2 calyx teeth connate into an entire lip; stipe of ovary ca. 4 mm, with a small cup-shaped disk at base; style and filaments coiled inward for 1 turn in upper part 2a. var. *gracilis*
- 1b. Upper 2 calyx teeth connate into an emarginate lip; stipe of ovary ca. 2 mm, without disk at base; style and filaments coiled inward for 2 turns in upper part 2b. var. *brevipes*

2a. Cochlianthus gracilis var. *gracilis*

细茎旋花豆(原变种) xi jing xuan hua dou (yuan bian zhong)

Leaflets strigose on both surfaces. Upper 2 calyx teeth connate into an entire lip. Ovary with ca. 4 mm slender stipe and cup-shaped disk at base. Style and filaments coiled inward for 1 turn in upper part. Fl. Sep.

Open forests, mountain slopes; ca. 1400 m. Xizang, SW Yunnan [Bhutan, Nepal].

2b. Cochlianthus gracilis var. *brevipes* C. F. Wei, Bull. Bot. Res., Harbin 5(2): 49. 1985.

细茎旋花豆 xi jing xuan hua dou

Herbs, slender, twining and climbing. Stems hairy at first, later glabrescent. Leaflets membranous or papery, strigose on both surfaces, terminal leaflet ± narrowly ovate-rhomboid, symmetric, lateral ones oblique, 5–9 × 2–6 cm, base broadly cuneate or obtuse, apex caudate-acuminate. Calyx densely hispidulous; upper 2 teeth connate into an entire or emarginate lip; lowest tooth lanceolate, 6–7 mm. Corolla pink or light purple; standard obovate-orbicular or suborbicular, ca. 2 × 1.7 cm; wings broadly spatulate, slightly longer than or as long as standard, base with auricle as long as claw, apex rounded; keel much longer than wings, upper part coiled inward, base with long claw and short auricle. Ovary with 2–4 mm stipe, with or without small cup-shaped disk at base. Style and filaments coiled inward for 1 or 2 turns in upper part. Legumes linear-oblong, densely hirsute with brownish black long hairs.

短柄旋花豆 duan bing xuan hua dou

Leaflets densely hairy. Upper 2 calyx teeth connate into an emarginate lip. Ovary with thick, short stipe, without cup-shaped disk at base. Style and filaments coiled inward for 2 turns in upper part. Fl. Aug–Sep.

• Scrub, roadsides, mountain slopes; ca. 1800 m. Sichuan (Baoping).

One of us (Thulin) has seen no material of *Cochlianthus gracilis* var. *brevipes*, but, judging from the description, it seems so different from typical *C. gracilis* that it would perhaps be better treated as a distinct species. Further study is needed.

